

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Limit/Abn Current

History1

History2

Machine Id INTERNATIONAL 06 IH Component Diesel Engine Fluid GENERIC WITH NT (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test

UOM Method

WEAR	

All component wear rates are normal.

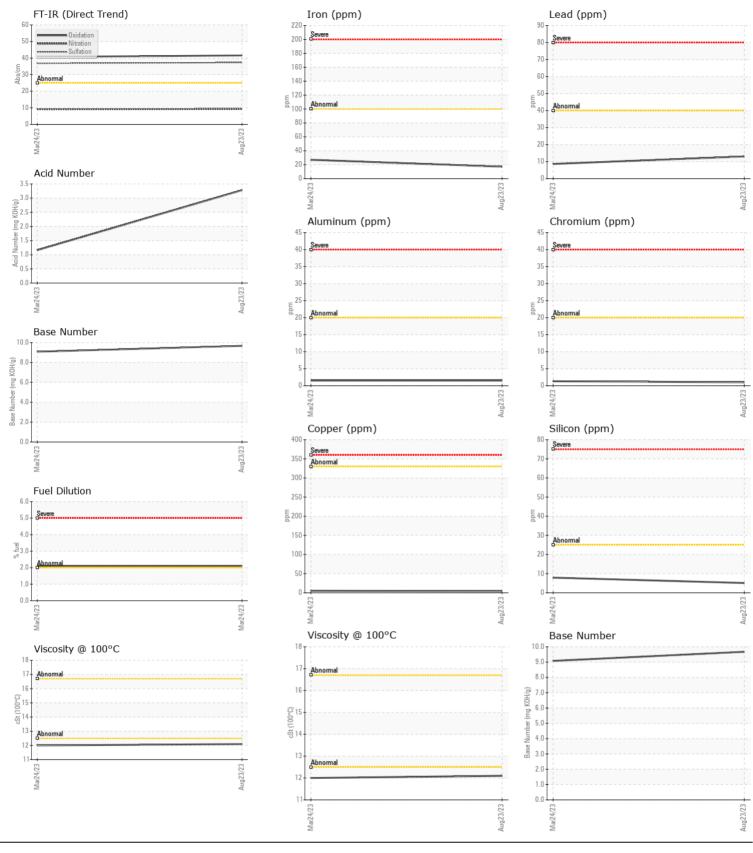
CONTAMINATION

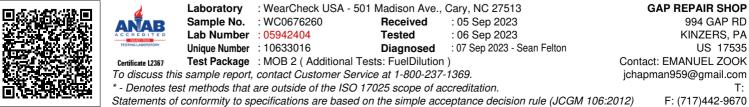
There is no indication of any contamination in the oil.

	1631	00101	Methou	LIIIII/AUII	Current	Thistory	THStoryz
	Sample Number		Client Info		WC0676260	WC0676349	
	Sample Date		Client Info		23 Aug 2023	24 Mar 2023	
	Machine Age	mls	Client Info		170000	160000	
	Oil Age	mls	Client Info		11000	14000	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	ATTENTION	
	Iron	ppm	ASTM D5185m	>100	17	27	
	Chromium	ppm	ASTM D5185m	>20	1	1	
	Nickel	ppm	ASTM D5185m	>4	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m	>20	2	2	
	Lead	ppm	ASTM D5185m	>40	13	9	
	Copper	ppm	ASTM D5185m	>330	4	5	
	Tin	ppm	ASTM D5185m	>15	<1	1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	<u></u>				_		
	Silicon	ppm	ASTM D5185m	>25	5	8	
	Potassium	ppm	ASTM D5185m	>20	5		
	Fuel	%	ASTM D3524	>2.0	<1.0	▲ 2.1	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.5	0.6	
	Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.1	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	37.3	36.8	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Sodium	ppm	ASTM D5185m		11	4	
	Boron	ppm	ASTM D5185m		14	5	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		69	52	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m		610	712	
	Calcium	ppm	ASTM D5185m		1527	1282	
	Phosphorus	ppm	ASTM D5185m		1063	996	
	Zinc	ppm	ASTM D5185m		1259	1187	
	Sulfur	ppm	ASTM D5185m		4011	3726	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	41.6	40.7	
	Acid Number (AN)	mg KOH/g	ASTM D8045		3.278	1.16	
	Base Number (BN)	mg KOH/g	ASTM D2896		9.67	9.08	
	Visc @ 100°C	cSt	ASTM D445		12.1	12.0	

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.





Contact/Location: EMANUEL ZOOK - GAPKIN Page 2 of 2